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mental problems of sex, for we believe that many of these problems are to be solved only with the structurally simpler forms of life like the mucors.

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## SCIENTIFIC EVENTS

THE DIVISION OF STATES RELATIONS OF THE NATIONAL RESEARCH COUNCIL

A STATEMENT concerning the work of the division has been issued by the council, in

which the chairman, Professor John C. Merriam, of the University of California, writes:

The Division of States Relations is organized with special reference to the consideration of research interests related to organization of the states as political and economic units. In our commonwealth the state presents an important form of organization for the development of certain aspects of science. The function of science in such a unit is to direct the conservative use of the state's natural resources, to increase productivity, to improve sanitation, and in other ways to promote prosperity and the public welfare. The purposes of this division may be stated in simplest form as follows:

- 1. To obtain information as to the most effective types of organization for groups of departments concerned with research within state governments.
- 2. To become acquainted with the best methods of cooperation among the institutions within the state—educational, commercial and industrial—which are concerned with scientific research.
- 3. To study the wider outside relations of research in state organizations, including the contracts with activities of other states and with national agencies of the country.

However, much information upon the present situation is needed before steps can be suggested for the closer coordination of state scientific agencies. The division is, therefore, undertaking a study of the present relationships of the various scientific agencies in the government of a number of the states. Several systems for the organization of state scientific departments are in operation, some, presumably, with better effect than others. Relations have been variously developed between these state departments and the scientific groups in state educational institutions. The relation between research work in many state departments and the work of enforcing the regulations based upon scientific investigation has attracted attention from the point of view both of science and of political economy. Moreover, determination of the most satisfactory forms for central bodies which may be used to organize scientific effort within states, and of the auspices under which such bodies should act will require much careful study. The nature of the state organization must be adapted to the particular situation found in the state in which it may seem desirable to organize such a body. It is believed that careful review of present conditions and of means for improving them is warranted by the possible gains in the progress of science and the advance in public welfare which may be expected from the most rational development of these scientific agencies. The division bespeaks the cooperation in this study of all those who are interested in this aspect of the advancement of science.

# SUMMER MEETING OF THE AMERICAN INSTI-TUTE OF CHEMICAL ENGINEERS

The summer meeting of the institute will be held in Canada. The date has been fixed tentatively as June 21–26. Plans as worked out at present include a meeting of two days, Monday and Tuesday, at Montreal, for the business sessions, reading of papers and possibly one or two excursions to chemical industries in Montreal.

The program of papers to be presented is being prepared and the secretary desires information as to papers being prepared for presentation at this meeting. Members are urged to present to the society as many papers as possible in order to make the meeting profitable and the *Transactions* valuable. Papers on any phase of chemical engineering work would be welcome. A special endeavor is being made to secure papers on electrolytic industries and papers on this subject are especially desired.

Wednesday will be spent at Ottawa visiting the copper and nickel refinery of the British-American Nickel Corporation, also inspection of the government buildings and the laboratories of the Bureau of Mines.

Thursday and Friday will be spent at Shawinigan Falls seeing the power development and the electrolytic industries located in this vicinity.

Saturday will be spent at LaTuque where we have secured permission from the Brown Company for a visit to the very large sulphate pulp mill where the explosion process described by Hugh K. Moore at our Savannah meeting is in operation. From this point a trip is being planned to the very large artificial lake which has been made at La Loutre. This includes a 50 mile boat trip, stopping at a fishing camp on the lake where there will be opportunity for motor boating and fishing. After a stop of a day or two in this very picturesque

and wild part of Canada, the return trip will be made to Quebec.

> J. C. Olsen, Secretary

#### THE AMERICAN PHYSICAL SOCIETY

THE one hundred and third regular meeting of the American Physical Society will be held in Washington, at the Bureau of Standards, on Friday and Saturday, April 23 and 24. The first session will begin at 10 o'clock on Friday morning. The program contains the titles of forty-six papers.

The other meetings for the calendar year will be as follows: The Thanksgiving meeting, on November 27, will be held at Case School of Applied Science in Cleveland, instead of in Chicago. The annual meeting, beginning on December 28, will be held in Chicago, this being the occasion of the special Quadrennial Meeting of the American Association for the Advancement of Science and the Affiliated Societies. The October meeting will be omitted for the year 1920.

The Pacific Coast Section will hold a meeting at the University of Washington, in Seattle, at the time of the meeting of the Pacific Division, A. A. A. S., June 17–19, 1920. Correspondence relating to this meeting should be addressed to the Secretary of the Pacific Coast Section, Professor E. P. Lewis, University of California, Berkeley, California.

DAYTON C. MILLER, Secretary

CASE SCHOOL OF APPLIED SCIENCE

## SCIENTIFIC NOTES AND NEWS

THE National Academy of Sciences will hold its annual meeting at the U. S. National Museum, Washington, D. C., April 26, 27 and 28. The William Ellery Hale Lecture will be given on April 26 by Dr. Harlow Shapley, of the Mount Wilson Solar Observatory, and Dr. Heber D. Curtis, of the Lick Observatory, on "The Scale of the Universe."

THE American Philosophical Society is holding its general meeting in Philadelphia on April 22, 23 and 24. On the evening of the